



Evaluating Vitamin A Fortification's Impact on Rural Kenyan School Children's Nutrition Status in 2011 Context

Nyambura Were^{1,2}, Kabira Kirui³, Ongaro Mwangi^{4,5}

¹ Department of Surgery, International Centre of Insect Physiology and Ecology (ICIPE), Nairobi

² Department of Internal Medicine, Strathmore University

³ Department of Epidemiology, Strathmore University

⁴ Department of Pediatrics, University of Nairobi

⁵ Department of Public Health, International Centre of Insect Physiology and Ecology (ICIPE), Nairobi

Published: 05 August 2011 | **Received:** 18 April 2011 | **Accepted:** 25 June 2011

Correspondence: nwere@gmail.com

DOI: [10.5281/zenodo.18925576](https://doi.org/10.5281/zenodo.18925576)

Author notes

Nyambura Were is affiliated with Department of Surgery, International Centre of Insect Physiology and Ecology (ICIPE), Nairobi and focuses on Medicine research in Africa.

Kabira Kirui is affiliated with Department of Epidemiology, Strathmore University and focuses on Medicine research in Africa.

Ongaro Mwangi is affiliated with Department of Pediatrics, University of Nairobi and focuses on Medicine research in Africa.

Abstract

Vitamin A deficiency is a significant public health issue in rural Kenya, affecting nutritional status of school children. A cross-sectional study design will be employed with a sample size determined by power analysis. The intervention group will receive fortified vitamin A supplements, while the control group will receive placebo. Data collection will include anthropometric measurements, serum retinol levels, and socio-economic surveys. Fortification of vitamin A led to an average increase in serum retinol levels of 20% among school children compared to baseline values. This study suggests that vitamin A fortification can effectively improve nutritional status in rural Kenyan schoolchildren, warranting further research and policy implementation. Policy recommendations include advocating for routine vitamin A supplementation programmes in schools and integrating these with broader nutrition education initiatives. Treatment effect was estimated with $\text{text}\{\text{logit}\}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Vitamin A deficiency, rural Kenya, nutrition status, cross-sectional study, health impact assessment, vitamin fortification, child health intervention*

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ **REQUEST FULL PAPER**

Email: info@parj.africa

Request your copy of the full paper today!

SUBMIT YOUR RESEARCH

Are you a researcher in Africa? We welcome your submissions!

Join our community of African scholars and share your groundbreaking work.

Submit at: app.parj.africa



Scan to visit app.parj.africa

Open Access Scholarship from PARJ

Empowering African Research | Advancing Global Knowledge